

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of estimating [[the]] ~~a~~ pitch of a speech signal [[(2)]], said method comprising ~~the steps of~~:

- [[•]] dividing the speech signal into segments[[,]];
 - [[•]] calculating for each segment a conformity function for the signal[[, and]];
 - [[•]] detecting peaks in the conformity function[[,]];
~~characterized in that the method further comprises the steps of:~~
 - [[•]] estimating an average distance between said peaks[[,]]; and
 - [[•]] using the estimate of said average distance as an estimate of the pitch.

2. (Currently Amended) [[A]] The method according to claim 1, ~~characterized in that it further comprises the steps of~~ further comprising:

- [[•]] sampling the speech signal to obtain a series of samples[[,]]; and
- [[•]] performing said division into segments such that each segment has a fixed number of consecutive samples.

3. (Currently Amended) [[A]] The method according to claim 1; or 2, ~~characterized in that it further comprises the steps of~~ comprising:

- [[•]] estimating a set of filter parameters using linear predictive analysis (LPA)[[,]];
 - [[•]] providing a modified signal [[(26)]] by filtering the speech signal through a filter based on said estimated set of filter parameters[[,]]; and
 - [[•]] calculating said conformity function of the modified signal.

4. (Currently Amended) [[A]] The method according to ~~any one of claims 1 to 3~~ claim 1, characterized in that wherein said conformity function is calculated as an autocorrelation function.

5. (Currently Amended) [[A]] The method according to any one of claims 1 to 4, characterized in that it further comprises the steps of to claim 1 further comprising:

- [[•]] calculating for each peak in the conformity function the difference between the position of the peak and the estimate of said average distance[,]; and
- [[•]] providing an improved estimate of the pitch by selecting as the improved estimate the position of the peak having the smallest value of said difference.

6. (Currently Amended) [[A]] The method according to claim 5, characterized in that it further comprises the step of further comprising:

- [[•]] selecting, if the peak having the smallest value of said difference is represented by a number of samples, the sample having the maximum amplitude of said conformity function as said improved estimate of the pitch.

7. (Currently Amended) ~~Use of the~~ The method according to any one of claims 1 to 6 in a mobile telephone claim 1, wherein said method is used in a mobile telephone.

8. (Currently Amended) A device adapted to estimate [[the]] a pitch of a speech signal, said device (2), and comprising:

- [[•]] means [[(3)]] for dividing the speech signal into segments[,];
- [[•]] means [[(5)]] for calculating for each segment a conformity function for the signal[, and];
- [[•]] means [[(6)]] for detecting peaks in the conformity function[,]; characterized in that the device is further adapted to:

- [[•]] means for estimating estimate an average distance between said peaks[,]; and
- [[•]] means for using [[use]] the estimate of said average distance as an estimate of the pitch.

9. (Currently Amended) [[A]] The device according to claim 8, characterized in that it further comprises further comprising:

- [[•]] means [[(3)]] for sampling the speech signal to obtain a series of samples[,]; and
- [[•]] means for performing said division into segments such that each segment has a fixed number of consecutive samples.

10. (Currently Amended) [[A]] The device according to claim 8 or 9, characterized in that it further comprises further comprising:

- [[•]] means [[(4; 24)]] for estimating a set of filter parameters using linear predictive analysis (LPA)[,];
- [[•]] means [[(4; 25)]] for providing a modified signal by filtering the speech signal through a filter based on said estimated set of filter parameters[,]; and
- [[•]] means [[(5)]] for calculating said conformity function of the modified signal.

11. (Currently Amended) [[A]] The device according to claim 8, wherein any one of claims 8 to 10, characterized in that said conformity function is an autocorrelation function.

12. (Currently Amended) [[A]] The device according to claim 8 further comprising any one of claims 8 to 11, characterized in that it further comprises:

[[•]] means for calculating for each peak in the conformity function the difference between the position of the peak and the estimate of said average distance[[.]]; and
[[•]] means for providing an improved estimate of the pitch by selecting as the improved estimate the position of the peak having the smallest value of said difference.

13. (Currently Amended) [[A]] The device according to claim 12, characterized in that it is wherein the device is further adapted to select, if the peak having the smallest value of said difference is represented by a number of samples, the sample having the maximum amplitude of said conformity function as said improved estimate of the pitch.

14. (Currently Amended) [[A]] The device according to claim 8, wherein any one of claims 8 to 13, characterized in that the device is a mobile telephone.

15. (Currently Amended) [[A]] The device according to claim 8, wherein any one of claims 8 to 13, characterized in that the device is an integrated circuit.